

Amendment to the Claims

1. (Currently Amended) A process for activating a regenerated, but not re-activated, catalyst comprising:

introducing said catalyst into ~~an~~ a slurry HCS reactor operating ~~containing~~
~~catalyst rejuvenation means~~ at HCS slurry process conditions and containing
catalyst rejuvenation means whereby said catalyst is activated.

2. (Currently Amended) The ~~Process~~ process as in claim 1 wherein the HCS reactor operates in the range of 150-320°C.

3. (Currently Amended) The ~~Process~~ process as in claim 1 wherein the HCS reactor operates in the range of 5.5-42.0 bar.

4. (Currently Amended) The ~~Process~~ process as in claim 1 wherein the HCS reactor hourly gas space velocities for syngas operates in the range of 100-40,000 V/hr/V.

Claims 5 to 8 (Cancelled)

9. (Currently Amended) The process as in claim 1 wherein the cobalt catalyst is a bimetallic catalyst comprising ~~with the first catalyst metal has as a component or is a compound of Co and the second catalyst metal has as a component or is a compound of at least one member selected from the group of Re and Ru.~~

10. (Original) A process according to claim 1 wherein said regenerated, but not re-activated catalyst is obtained by:

removing a portion of said catalyst from said operating HCS reactor to a regeneration vessel;

subjecting the removed catalyst to a regeneration environment to form said regenerated catalyst.

11. (Currently Amended) The process as in claim ~~11~~ 10 wherein the said catalyst is removed on a continuous or semi-continuous basis.

12. (Original) The process as in claim 11 wherein said regeneration environment is an oxidating environment.

13. (Original) The process as in claim 11 wherein said oxidative environment operates at greater than 300°C.

Claims 14 to 17 (Cancelled)

18. (Currently Amended) The process as in claim 11 wherein the cobalt catalyst is a bimetallic catalyst ~~with the first catalyst metal has as a component or is a compound of~~ comprising Co and ~~the second catalyst metal has as a component or is a compound of~~ at least one member selected from the group of Re and Ru.

19. (Currently Amended) The process as in claim 11 wherein said removed catalyst is filtered to remove at least a portion of reactants and products prior to ~~entering~~ subjecting the removed catalyst to said regenerative environment.

20. (Currently Amended) The process of claim ~~21~~ 11 wherein said removed catalyst is subjected to the filtration is accomplished by H₂ stripping prior to subjecting the removed catalyst to said regeneration environment.

21. (Currently Amended) A hydrocarbon synthesis process comprising:

providing a an HCS slurry reactor containing catalyst rejuvenation means;

containing, or having introduced into said HCS reactor, at least one cobalt catalyst from the group of a fresh, passivated catalyst, a fresh, activated catalyst, a short-term deactivated catalyst or a long term deactivated catalyst;

contacting said catalyst with H₂ and CO at a mole ratio between 0.5 to 4.0, a temperature range of 150-320°C, a pressure range of 5.5-42.0 bar and an hourly gas space velocity of 100-40,000 V/hr/V at standard volumes;

periodic or continuous removal of said catalyst to a regeneration vessel producing regenerated, but not re-activated, catalyst; and

returning said regenerated, but not re-activated, catalyst to said HCS reactor whereby said regenerated, but not re-activated, catalyst is re-activated at HCS operating conditions.

Claims 22 to 25 (Cancelled)

26. (Currently Amended) The process as in claim ~~23~~ 21 wherein the cobalt catalyst is ~~a bimetallic catalyst with the first catalyst metal has as a component or is a compound of~~ comprises Co and ~~the second catalyst metal has as a component or is a compound of~~ at least one member selected from the group of Re and Ru.

27. (New) The process of claim 13 wherein the cobalt catalyst is a Co-Re/TiO₂ catalyst.

28. (New) The process of claim 26 wherein the cobalt catalyst is a
Co-Re/TiO₂ catalyst.